

LANCASTER COUNTY

COUNTY - CITY BUILDING
LINCOLN, NEBRASKA 68508
BOARD OF COMMISSIONERS

Telephone: (402) 441-7410
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**IT IS THE VENDOR'S RESPONSIBILITY TO CHECK FOR
ADDENDUMS PRIOR TO SUBMITTING PROPOSALS**

NOTICE TO BIDDERS SPECIFICATION NO. 02-268

Lancaster County intends to purchase and invites you to submit a sealed bid for:

TRUCK BODY WITH VARIOUS ATTACHMENTS (5-6 Cu. Yd. Capacity) for LANCASTER COUNTY ENGINEER

MEETING OR EXCEEDING LANCASTER COUNTY'S SPECIFICATIONS

Sealed bids will be received by Lancaster County, Nebraska on or before **12:00 noon Central Time, Wednesday, December 18, 2002**, in the office of the Purchasing Agent, "**K**" Street Complex, Suite 200, 440 So. 8th Street, Lincoln, NE 68508. Bids will be publicly opened and read aloud in the First Floor Conference Room at the "K" Street Complex.

Bidders should take caution if U.S. mail or mail delivery services are used for the submission of bids. Mailing should be made in sufficient time for bids to arrive in the Purchasing Division, prior to the time and date specified above. Late bid will not be considered.

FAX bid responses are not acceptable, all bids must possess an original signature and be in a sealed envelope.

COMMISSIONERS

*KATHY CAMPBELL * LARRY HUDKINS * RAY STEVENS * BERNIE HEIER * BOB WORKMAN*
KERRY EAGAN, Chief Administrative Officer

INSTRUCTIONS TO BIDDERS

LANCASTER COUNTY, NEBRASKA PURCHASING DIVISION

1. BIDDING PROCEDURE

- 1.1 Bidder shall submit two (2) complete sets of the bid documents and all supporting material. All appropriate blanks shall be completed. Any interlineation, alteration or erasure on the specification document shall be initialed by the signer of the bid. Bidder shall not change the proposal form nor make additional stipulations on the specification document. Any amplified or qualifying information shall be on the bidder's letterhead and firmly attached to the specification document.
- 1.2 Bid prices shall be submitted on the Proposal Form included in the bid document and in a sealed envelope with the bid number and/or description clearly marked on the outside of the envelope.
- 1.3 Each bid must be legibly printed in ink or by typewriter, include full name, business address, and telephone no. of the bidder; and be signed in ink by the bidder.
- 1.4 A bid by a firm or organization other than a corporation must include the name and address of each member.
- 1.5 A bid by a corporation must be signed in the name of such corporation by a duly authorized official thereof.
- 1.6 Any person signing a bid for a firm, corporation, or other organization must show evidence of his authority so to bind such firm, corporation, or organization.
- 1.7 Bids received after the time and date established for receiving bids will be rejected.

2. EQUAL OPPORTUNITY

- 2.1 Each bidder agrees that it shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, disability, national origin, age, or marital status. In the employment of persons, bidder shall take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to race, color, religion, sex, disability, national origin, age, or marital status.

3. BIDDER'S REPRESENTATION

- 3.1 Each bidder by signing and submitting a bid, represents that the bidder has read and understands the specification documents, and the bid has been made in accordance therewith.
- 3.2 Each bidder for services further represents that the bidder is familiar with the local conditions under which the work is to be done and has correlated the observations with the requirements of the bid documents.

4. INDEPENDENT PRICE DETERMINATION

- 4.1 By signing and submitting this bid, the bidder certifies that the prices in this bid have been arrived at independently, without consultation, communication or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor; unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder prior to bid opening directly or indirectly to any other bidder or to any competitor; no attempt has been made, or will be made, by the bidder to induce any person or firm to submit, or not to submit, a bid for the purpose of restricting competition.

5. CLARIFICATION OF SPECIFICATION DOCUMENTS

- 5.1 Bidders shall promptly notify the Purchasing Agent of any ambiguity, inconsistency or error which they may discover upon examination of specification documents.

- 5.2 Bidders desiring clarification or interpretation of the specification documents shall make a written request which must reach the Purchasing Agent at least seven (7) calendar days prior to date and time for bid receipt.
- 5.3 Interpretations, corrections and changes made to the specification documents will be made by written addenda.
- 5.4 Oral interpretations or changes to the Specification Documents made in any other manner, will not be binding on the County; and bidders shall not rely upon such interpretations or changes.

6. ADDENDA

- 6.1 Addenda are written instruments issued by the County prior to the date for receipt of bids which modify or interpret the specification document by addition, deletion, clarification or correction.
- 6.2 Addenda will be mailed or delivered to all who are known by the County to have received a complete set of specification documents.
- 6.3 Copies of addenda will be made available for inspection at the office of the Purchasing Agent.
- 6.4 No addendum will be issued later than forty-eight (48) hours prior to the date and time for receipt of bids, except an addendum withdrawing the invitation to bid, or an addendum which includes postponement of the bid.
- 6.5 Bidders shall ascertain prior to submitting their bid that they have received all addenda issued, and they shall acknowledge receipt of addenda on the proposal form.

7. ANTI-LOBBYING PROVISION

- 7.1 During the period between the bid close date and the contract award, bidders, including their agents and representatives, shall not directly discuss or promote their bid with any member of the County Board or County Staff except in the course of County-sponsored inquiries, briefings, interviews, or presentations, unless requested by the County.

8. BRAND NAMES

- 8.1 Wherever in the specifications or proposal form brand names, manufacturer, trade name, or catalog numbers are specified, it is for the purpose of establishing a grade or quality of material only; and the term "or equal" is deemed to follow.
- 8.2 It is the bidder's responsibility to identify any alternate items offered in the bid, and prove to the satisfaction of the County that said item is equal to, or better than, the product specified.
- 8.3 Bids for alternate items shall be stated in the appropriate blank on the proposal form, or if the proposal form does not contain blanks for alternates, bidder MUST attach to the specification documents on Company letterhead a statement identifying the manufacturer and brand name of each proposed alternate, plus a complete description of the alternate items including illustrations, performance test data and any other information necessary for an evaluation. The bidder must indicate any variances by item number from the specification document no matter how slight. Bidder must fully explain the variances from the specification document, since brochure information may not be sufficient.
- 8.4 If variations are not stated in the proposal, it will be assumed that the item being bid fully complies with the County's specifications.

9. DEMONSTRATIONS/SAMPLES

- 9.1 Bidders shall demonstrate the exact item(s) proposed within seven (7) calendar days from receipt of such request from the County.
- 9.2 Such demonstration can be at the County delivery location or a surrounding community.
- 9.3 If bidder does not have an item in the area, it will be at the bidder's expense to send appropriate County personnel to the nearest location to view and inspect proposed item(s).
- 9.4 If items are small and mailable, and the bidder is proposing an alternate product, the bidder MUST supply a sample of the exact item. Samples will be returned at bidder's expense after receipt by the County of acceptable goods. Bidders must indicate how samples are to be returned.

10. DELIVERY

- 10.1 Each bidder shall state on the proposal form the date upon which he can make delivery of all equipment or merchandise. Time required for delivery is hereby made an essential element of the bid.
- 10.2 The County reserves the right to cancel orders, or any part thereof, without obligation, if delivery is not made within the time(s) specified on the proposal form.
- 10.3 All bids shall be based upon delivery of the equipment or merchandise F.O.B. the County at the location specified by the County, with all transportation charges paid.

11 WARRANTIES, GUARANTEES AND MAINTENANCE

- 11.1 Copies of the following documents must accompany the bid proposal for all items being bid:
1. Manufacturer's warranties and/or guarantees.
 2. Bidder's maintenance policies and associated costs.
- 11.2 As a minimum requirement of the County, the bidder will guarantee in writing that any defective components discovered within a one (1) year period after the date of acceptance shall be replaced at no expense to the County. Replacement parts of defective components shall be shipped at no cost to the County. Shipping costs for defective parts required to be returned to the bidder shall be paid by the bidder.
- 11.3 Bidder Warrants and represents to the County that all software/firmware/ hardware/equipment /systems developed, distributed, installed or programmed by Bidder pursuant to this Specification and Agreement.

12. ACCEPTANCE OF MATERIAL

- 12.1 All components used in the manufacture or construction of materials, supplies and equipment, and all finished materials, shall be new, the latest make/model, of the best quality, and the highest grade workmanship.
- 12.2 Material delivered under this proposal shall remain the property of the bidder until:
1. A physical inspection and actual usage of this material is made and found to be acceptable to the County; and
 2. Material is determined to be in full compliance with the specifications and accepted proposal.
- 12.3 In the event the delivered material is found to be defective or does not conform to the specification documents and accepted proposal, then the County reserves the right to cancel the order upon written notice to the bidder and return materials to the bidder at bidder's expense.
- 12.4 Successful bidder shall be required to furnish title to the material, free and clear of all liens and encumbrances, issued in the name of Lancaster County, Nebraska, as required by the specification documents or purchase orders.

- 12.5 Selling dealer's advertising decals, stickers or other signs shall not be affixed to equipment. Vehicle mud flaps shall be installed blank side out with no advertisements. Manufacturer's standard production forging, stamping, nameplates and logos are acceptable.

13. BID EVALUATION AND AWARD

- 13.1 The signed bid proposal shall be considered an offer on the part of the bidder. Such offer shall be deemed accepted upon issuance by the County of purchase orders, contract award notifications, or other contract documents appropriate to the work.
- 13.2 No bid shall be modified or withdrawn for a period of sixty (60) calendar days after the time and date established for receiving bids, and each bidder so agrees in submitting the bid.
- 13.3 In case of a discrepancy between the unit prices and their extensions, the unit prices shall govern.
- 13.4 The bid will be awarded to the lowest responsive, responsible bidder whose proposal will be most advantageous to the County, and as the County deem will best serve their requirements.
- 13.5 The County reserves the right to accept or reject any or all bids, or parts of bids; to request rebids; to waive irregularities and technicalities in bids; or to award the bid on a split-order basis, or lump-sum basis; such as shall best serve the requirements and interests of the County.

14. INDEMNIFICATION

- 14.1 The bidder shall indemnify and hold harmless the County, its members, its officers and employees from and against all claims, damages, losses, and expenses, including, but not limited to attorney's fees arising out of or resulting from the performance of the contract, provided that any such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property other than goods, materials and equipment furnished under this contract) including the loss of use resulting therefrom; is caused in whole or part by any negligent act or omission of the bidder, any subcontractor, or anyone directly or indirectly employed by any one of them or anyone for whose acts made by any of them may be liable, regardless of whether or not it is caused by a party indemnified hereunder.
- 14.2 In any and all claims against the County or any of its members, officers or employees by an employee of the bidder, any subcontractor, anyone directly or indirectly employed by any of them or by anyone for whose acts made by any of them may be liable, the indemnification obligation under paragraph 14.1 shall not be limited in any way by any limitation of the amount or type of damages, compensation or benefits payable by or for the bidder or any subcontractor under worker's or workmen's compensation acts, disability benefit acts or other employee benefit acts.

15. TERMS OF PAYMENT

- 15.1 Unless other specification provisions state otherwise, payment in full will be made by the County within thirty (30) calendar days after all labor has been performed and all equipment or other merchandise has been delivered, and all such labor and equipment and other materials have met all contract specifications.

16. LAWS

- 16.1 The Laws of the State of Nebraska shall govern the rights, obligations, and remedies of the Parties under this proposal and any agreement reached as a result of this process.

SEALED BID

SPECIFICATION NO. 02-268

BID OPENING TIME: 12:00 NOON

DATE: Wednesday, December 18, 2002

ADDENDA RECEIPT: The receipt of the addenda to the specification number ____ through ____ is hereby acknowledged. Failure of any bidder to receive any addenda or interpretation shall not relieve the bidder from obligations specified in the bid. All addenda shall become part of the final contract document.

The undersigned submitter, having full knowledge of the requirements of Lancaster County for the above listed project and the terms and conditions of the request, agrees to provide the labor, materials and equipment in strict accordance with the specifications as prepared by the County for the consideration of the amount set forth in the following price schedule:

BIDDING SCHEDULE FOR TRUCK BODY WITH VARIOUS ATTACHMENTS

<u>ITEM</u>	<u>ITEM DESCRIPTION</u>	<u>QTY</u>	<u>UNIT PRICE</u>	<u>TOTAL PRICE</u>
1.	Dump bodies (10-12 cu. yd. capacity) Hydraulic system, Light system, snow plow, hitch, and tail gate spreader.	Four (4)	\$_____	\$_____
NOTE: Dump body, hitch-plow- spreader all to be installed and operational at delivery.				

Bid bond, performance and payment bonds WILL NOT BE REQUIRED

**NOTE: RETURN 2 COMPLETE COPIES OF BID OFFER AND SUPPORTING MATERIAL.
MARK OUTSIDE OF BID ENVELOPE AS FOLLOWS: SEALED BID FOR SPEC. NO. 02-268**

The undersigned signatory of the bidder represents and warrants that he has full and complete authority to submit this offer to Lancaster County, and to enter into a contract if this offer is accepted.

COMPANY NAME

BY (Signature)

STREET ADDRESS or P.O. BOX

(Print Name)

CITY, STATE ZIP CODE

(Title)

TELEPHONE NO.

(Date)

FAX NO.

EMPLOYER'S FEDERAL I.D. NO.
OR SOCIAL SECURITY NUMBER

BIDS MAY BE INSPECTED IN THE PURCHASING DIVISION OFFICES DURING NORMAL BUSINESS HOURS, AFTER TABULATION BY THE PURCHASING AGENT. IF YOU DESIRE A COPY OF THE BID TABULATION TO BE MAILED TO YOU, YOU MUST ENCLOSE A SELF-ADDRESSED STAMPED ENVELOPE WITH YOUR BIDDING DOCUMENTS.

EQUIPMENT SPECIFICATIONS
for
10-12 CUBIC YARD DUMP BODY-HYDRAULIC
SYSTEM-LIGHTING SYSTEM-SNOW PLOW HITCH-TAIL GATE SPREADER

1. APPLICATION

- 1.1 This dump body and accessory equipment will be mounted on a new 2003 International 7400 56,000 GVWR, cab and chassis for use by Lancaster County Engineers for hauling of earth, crushed rock, and gravel in snow plowing operation and ice control operations.
- 1.2 Detailed specifications of cab and chassis will be provided upon request.

2. MODEL

- 2.1 The equipment furnished under these specifications shall be new of the latest improved model in current production as offered to the commercial trade.
- 2.2 Bid shall include all installation and delivery costs to 444 Cherry Creek Rd., Lincoln, Ne.
- 2.3 Dimensions given are to be considered approximate intended to show type of Dump Body desired.

MEETS SPECS

YES	NO	3. <u>BODY</u>	
_____	_____	3.1	10-12 Cubic yard capacity, struck
_____	_____	3.2	Dimensions: Inside Length 14 foot
_____	_____		Inside Width 7 ft. to 7 ft. 3 in.
_____	_____		Side Height 34 inches
_____	_____		Front Head Height 42 inches
_____	_____		Tailgate Height 42 inches
_____	_____	3.3	Sides and front:
_____	_____		shall be fabricated from 10 gauge A1011 Grade 50 steel, 50,000 PSI yield strength.
_____	_____		Shall have 2" wide board pockets
_____	_____		Boxed top rail
_____	_____		Side rub rail shall have 45 slope
_____	_____		Two intermediate horizontal pressed in "V" Side braces and front braces or triple boxed side supports, 5 per side full height
_____	_____		All welds shall be continuous
_____	_____		4" radius front corner pillar
_____	_____		Shall include a 2 1/2" grip strut walkway full length both sides welded to brackets above rub rail.

Equipment Specs for 10-12 cu. yd. dump bodies con't

Meets Specs

YES NO

- 3.4 Tail Gate:
- shall be fabricated from 10 gauge A1011 Grade 50 steel, 50,000 PSI yield strength
 - Fully boxed upper and lower rails & 6 panel tail gate
 - All horizontal bracing shall be a 45 degree dirt shedding design
 - Shall have sloped top rear corner pillar 4" x 12 3/4" full depth
 - Welds shall be continuous
 - 1 1/2" thick upper tail gate hinges shall be offset forward approximately 5" and shall have 1 1/4" pivot pins with zerk lubrication.
 - Lower latch pins 1 1/4"
 - Upper and lower dog-leg slotted chain keepers with sufficient chain to allow tailgate to lay flat.
 - Integral dirt shedding top frame rail
- 3.5 Floor and Understructure
- Shall be fabricated from 7 ga. A1011 Grade steel, 50,000 PSI yield strength
 - 6" radius floor wings at sides with one piece center sheet
 - Interlocking Understructure
 - 11" interlocking channel longitudinal
 - 4" structural steel channel cross members on 12" centers
 - full width rear apron
- 3.6 Tail Gate Latch
- shall be retractable type with minimal 1" flame cut latch finger
 - In cab controlled air release tail gate
- 3.7 Lights and Reflectors
- shall meet Federal FMVSS No. 108
 - Combination stop/turn tail lights shall be recessed and mounted high in rear corner pillars. (No wire mesh over lens).
 - Clearance light, shall be recessed for protection and mounted in rubber sockets.
 - Wiring shall be one piece and in a plastic convoluted loom.
 - Red light for indicating when body is in up position is required and will be located in cab area
- 3.8 Extras:
- Mud flaps—mounted behind and in front of rear wheel to body and as per Nebraska Statues. Front mud flap shall be adequately strapped to body with bolts so that it:
 - a.) stays perpendicular to body as body is raised and
 - b.) does not hit truck components as body is lowered. Rear mud flaps shall be attached with adequately sized chain links.

Equipment Specs for 10-12 cu. yd. dump bodies con't

Meets Specs

YES NO

In cab controlled electric vibrator, installed on upper center of floor with reinforcement as required (Tendaire Industries, Inc. Model Power-Ox or approved equal.)

Cab shield to extend approximately 24 inches over cab.

4. HOIST

4.1 Telescopic head-mounted hoist

4.2 N.T.E.A. Class 110 hoist

4.3 50 degree dump angle

4.4 Three Stage high pressure cylinder

4.5 Mounting height-12 inches (+ or - one inch)

4.6 Body raise indicator lights

4.7 Body props (one each side)

4.8 Lowering speed control and stop control hydraulic valve

4.9 Cable pull-out with full length cable tube

NOTE: Body, hoist and cylinder shall be supplied by a single manufacturer.

5. P.T.O.

5.1 PTO driven pump to be driven off the front plate off the truck crankshaft. Truck will have 20 inch protrusion in front of grill

6. ICC BUMPER AND FRAME CUT OFF

6.1 Truck frame capped with 3/8 inch plate steel

6.2 Bumper frame constructed of 3 inch 3/8 web channel

6.3 Frame dimensions 34 inches wide x 26 inches high with top of side channels approximately 4 inches below top of truck frame to allow for body clearance in full raised position.

6.4 Lower frame channel 16 inches from ground

6.5 3 inch 3/8 web channel, upper horizontal frame, 10 inches from lower brace

6.6 3/4 inch plate steel pintle hitch mounting plate centered between side channel frame and attached to upper and lower horizontal frame

6.7 Pintle hitch mounting plate dimensions 10 inches x 10 inches with safety chain hooks included

6.8 3/8 x 2 1/2 inch flat steel frame braces from lower outside corner of bumper frame to bottom of truck frame, 25 inches long (bolted to truck frame)

6.9 3/8 x 2 1/2 inch flat steel frame braces from pintle hitch mounting plate to bottom of truck frame, 30 inches long (bolted to truck frame)

6.10 15 ton pintle hitch attached with grade #8 bolts and lock nuts (See attached diagram)

6.11 If angle frame cutoff as shown in diagram is not required for body clearance to full raised position, straight frame cutoff is acceptable

Equipment Specs for 10-12 cu. yd. dump bodies con't.

MEETS SPECS

YES NO

7. LIGHTS AND REFLECTORS

- | | | | |
|-------|-------|-----|--|
| _____ | _____ | 7.1 | Must meet or exceed F.M.V.S.S. 108 |
| _____ | _____ | 7.2 | Stop, tail and turn lights shall be recess mounted in rear corner posts |
| _____ | _____ | 7.3 | Clearance lights shall be recessed for protection and mounted in rubber sockets |
| _____ | _____ | 7.4 | All wiring shall be loomed and securely fastened |
| _____ | _____ | 7.5 | Wire connections or splices to be soldered and heat-shrink connections (crimp type not acceptable) |

8. EMERGENCY LIGHTING SYSTEM

- | | | | |
|-------|-------|--------|---|
| _____ | _____ | 8.1 | Furnish and install emergency lighting as follows: |
| _____ | _____ | 8.1.1 | Unity #30031 light bar, install as far forward on cab as possible |
| _____ | _____ | 8.1.2 | Star Pak 3-light system |
| _____ | _____ | 8.1.3 | One (1) model 3940-L double flash dummy strobe head mounted in center of light bar |
| _____ | _____ | 8.1.4 | Two (2) model 3920 double flash dummy strobe heads recess mounted in rear corner posts |
| _____ | _____ | 8.1.5 | One (1) model 3300 SWA remote power supply mounted behind drivers seat |
| _____ | _____ | 8.1.6 | One (1) model 3810 heavy duty cable assembly |
| _____ | _____ | 8.1.7 | Cab Mounted switch controls to allow use of either the cab mounted strobe or the two rear strobe lights, or all three lights at once, including hi-low control. |
| _____ | _____ | 8.1.8 | All lenses shall be amber |
| _____ | _____ | 8.1.9 | GROTE #64261-4 snow plow lights installed on right and left sides of light bar |
| _____ | _____ | 8.1.10 | All wiring from light bar to switch console shall be loomed and securely fastened with stick-on type wire ties |
| _____ | _____ | 8.1.11 | No holes drilled in cab for entry of wire loom or to connect wire ties |
| _____ | _____ | 8.1.12 | All wire connections shall be soldered heat-shrink type connections. (Crimp type and scotch lock connectors are not acceptable) |

9. HYDRAULICS

- | | | | |
|-------|-------|-----|---|
| _____ | _____ | 9.1 | Hydraulic pump to be piston (load sensing type) Rexroth A10V071 |
| _____ | _____ | 9.2 | Pump must be capable of 40 GPM and 3,000 PSI at 2500 RPM |
| _____ | _____ | 9.3 | Pump to have side ports to avoid 90 bends in the suction line |
| _____ | _____ | 9.4 | Case drain to be directed back to the tank without passing through the filter and internal bleed-down compensator |
| _____ | _____ | 9.5 | Hydraulic stack valve must be capable of nominal 30 GPM, with published flow curves to 40 GPM |

Equipment Specs for 10-12 cu. yd. dump bodies con't.

MEETS SPECS

YES NO

_____	_____	9.6	Valves to be pressure compensated, load sensing type with individual flow control compensators on each section
_____	_____	9.7	Changing a section from single to double acting to be done by replacing a shuttle cartridge
_____	_____	9.8	Valve Rexroth MP18 Arrangement
_____	_____		1. Inlet cap with inlet, outlet and load sensing ports
_____	_____		2. Single acting cylinder spool for hoist. Spring return with section compensator
_____	_____		3. Single acting cylinder spool for snowplow lift, spring return with pressure compensated adjustable flow control
_____	_____		4. Double acting cylinder spool for snowplow angle L/R with pressure compensated adjustable flow control
_____	_____		5. Single acting motor spool to control spinner function
_____	_____		6. Single acting spool to control auger function
_____	_____		7. Outlet cap
_____	_____		8. All sections to be proportional solenoid operated 12 VDC

10. HYDRAULIC LINES AND HOSES

_____	_____	10.1	All hoses from output ports on reservoir to snow plow lift cylinder and cushion valve shall be ½" with a minimum 4000 PSI working pressure
_____	_____	10.2	Spinner and conveyer pressure hoses shall be ½" with a minimum 4000 PSI working pressure
_____	_____	10.2.1	Spinner and conveyer hoses shall extend from output ports on valve enclosure to the ICC bumper (see diagram)
_____	_____	10.2.2	A mounting plate with bulkhead style fittings shall be attached to the inside of the ICC bumper
_____	_____	10.2.3	½ inch Aeroquip stainless steel quick attach couplers shall be installed on bulkhead fittings and shall not extend beyond outer edge of bumper
_____	_____	10.3	Return hose for Material spreader shall be 3/4" with a minimum 3000 PSI working pressure
_____	_____	10.3.1	Return hose shall be installed in the same manner as the spinner and conveyer hoses with a 3/4" Aeroquipo stainless steel quick attach coupler
_____	_____	10.4	Hose to dump body cylinder shall be the size and pressure rating as recommended by body and cylinder manufacturer
_____	_____	10.5	All lines and hoses shall be securely fastened in a neat and professional manner

11. RESERVOIR

_____	_____	11.1	Reservoir to serve as the hydraulic oil reservoir and value enclosure designed for over-the-road and mobile applications
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Equipment Specs for 10-12 cu. yd. dump bodies con't.

MEETS SPECS

YES NO

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|-------|-------|------|---|
| _____ | _____ | 11.2 | Reservoir shall be 35 gallon minimum "useable" oil capacity. The breather cap should be mounted to an inspection lid. Inspection lid shall also provide for an in tank mounted return line filter. Breather cap fill neck must be screened. |
| _____ | _____ | 11.3 | Reservoir shall be complete with a sight temperature gauge with a metal protective shield and mounting points available on both sides of reservoir to accommodate installation on either passenger or drivers side of vehicle. Assembly will incorporate a magnetic drain plug. |
| _____ | _____ | 11.4 | Suction port will allow for installation at a 2" NPT 50 GPM Suction screen. Suction screen will have a 3 to 5 PSI by-pass spring. |
| _____ | _____ | 11.5 | Reservoir must be constructed of a minimum 10 gauge steel with the option of stainless steel construction. |
| _____ | _____ | 11.6 | As an integral part of the reservoir there shall be an area for mounting of the hydraulic stack valve. Reservoir must be of template style for bulkhead "through" mounting of the valve and be completely free from internal tubing or hoses from work parts and inlet of the valve. Valve must be removeable as a unit with template through the top of the reservoir for service and accessibility. Valve compartment area will have a drain tube of at least 1 1/4" in diameter and be placed to the front side of the reservoir and incorporate an angled base below the valve to allow fluid and condensation to flow easily to drain tube area. |
| _____ | _____ | 11.7 | There must be three additional side additional side access panels for further service and accessibility. All panels must have formed gaskets and be weather sealed with bottom welded mounting nuts for panels. All panels and valve plate to be screwed with stainless steel bolts. |
| _____ | _____ | 11.8 | Assembly will be designed to accommodate a variety of valve controls including, mechanical cables, pneumatic and electrical and any combination thereof. Electrical, air, and cable connectors shall be made via bulkhead connectors on the front (cab) side of the reservoir through the front panels. Hydraulic hose connections shall be made through the top of the valve plate for easy access. |
| _____ | _____ | 11.9 | Reservoir must be symmetrical and capable of mounting on either side of the truck frame. Model CP-RES35S-VMSG-LSSGTMF-DS or PS Service Guard reservoir is acceptable. |

12. CONTROL CONSOLE

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|-------|-------|------|---|
| _____ | _____ | 12.1 | Control console shall be constructed of stainless steel |
| _____ | _____ | 12.2 | Console shall have provisions for mounting GL-400-5 Spreader control |
| _____ | _____ | 12.3 | Angled face of console shall be for mounting of the spreader control |
| _____ | _____ | 12.4 | The top portion of the console shall be for the mounting of the hoist and plow controls |
| _____ | _____ | 12.5 | Hoist stick shall be 12 VDC proportional control with a neutral dead man lock. |

Equipment Specs for 10-12 cu. yd. dump bodies con't.

MEETS SPECS

YES NO

- | | | | |
|-------|-------|-------|---|
| _____ | _____ | 12.6 | Plow stick shall be a dual axis design 12 VDC on/off with a detent in the down position for plow float |
| _____ | _____ | 12.7 | The console shall also come with a touch guard 6 switch panel to operate the following, strobe lights, white strobe, front warning, strobe rear, vibrate and air trip. All switches shall be push button and be sealed. The switches shall be board mounted. All switches will have replaceable labels. The on /off switches shall be back lit at all times when the ignition is on and be green in color. The on/off switches when turned on shall change from green to red in color indicating that the function is on. If there is a failure in a light function the switch shall change back to green and blink letting the operator know there is a problem. Dip switch selectable latching or momentary function, selectable sequencing, audible indication when switch has a closure, on board LED diagnostics, including fault detection. The switch panel shall also come with a power distribution center. Power distribution shall have 6 high amp relays, 6 automatic reset circuit breakers and terminal strip for wire connectors all housed in a Nema 4X enclosure |
| _____ | _____ | 12.8 | A direct connect cable from the console to the power distribution shall be supplied. All connections shall be made on the bottom of the console and be twist lock amp connectors. All cables necessary shall come with the console. |
| _____ | _____ | 12.9 | Console shall be between the seats easily reachable by the operator, mounted on a tubular style stand. |
| _____ | _____ | 12.10 | Stormguard ModelSG20150XHX by Component Technology--- no exceptions. |

13. WIRING HARNESS

- | | | | |
|-------|-------|------|---|
| _____ | _____ | 13.1 | The system shall include all necessary wiring and switching required to be fully operational. |
| _____ | _____ | 13.2 | All wiring that will be exposed outside the vehicle cab shall be of weatherproof TPE type. |
| _____ | _____ | 13.3 | Wiring and harness system should meet ISO rating IP68 and NEMA 6. |
| _____ | _____ | 13.4 | The connections should be zinc die cast E-coated, similar to MIL Spec connector. Each should have three sealing points--the lock ring itself, a raised portion of the molded plastic around each pin and a Viton O Ring that seals the whole connector. |
| _____ | _____ | 13.5 | The cable jacket should be TPE-thermoplastic elastomer and molded to the connectors. Connectors and harness should be rated and tested for at temperature range from -30degrees C to +70degrees C. Connectors should be tested to be water tight when submerged in 6' of water for 24 hours, in 275' of water for 1 hour, and when subjected to a 1000 PSI pressure wash. The connector should be designed to have no corrosion after 5000 hours in a 35C salt spray. |

Equipment Specs for 10-12 cu. yd. dump bodies con't.

MEETS SPECS

YES NO

_____	_____	13.6 Cabling should be rated excellent in its resistance to oxidation, heat, oil, low temperature flexibility, weather, sun, ozone, abrasion, electrical priorities, flame, water, acid, alkali, gasolene, benzol teluol, degreaser solvents, alcohol, and weld slag. Harness to include all necessary sensors and cables.
-------	-------	--

14. GENERAL INFORMATION

- 14.1 Lancaster County will furnish and be responsible for the shipment of new 56,000 GVWR Cab and Chassis truck with tandem axles and 120" cab to tandem center to the successful bidder's place of business for installation and mounting of the dump bodies and hydraulic systems.
- 14.2 The completed units shall be delivered to the County Shop at 444 Cherry Creek Rd., Lincoln, NE. between 8:00 A.M. and 3:30 P.M. Monday thru Friday .
- 14.3 Successful bidder shall be responsible for supplying a completed vehicle sticker affixed to the vehicle in a proper location.
- 14.4 One (1) parts book shall be furnished with each unit upon delivery
- 14.5 Dump body rails shall be securely bolted to the frame of each truck in a manner to provide approximately 3 inches of clearance between front of body and back of cab, and insuring proper weight distribution for specified cab to axle.
- 14.6 Dump body shall be primed and painted to match the color of truck, chassis and cab. (Omaha Orange)
- 14.7 Dump body shall be rust proofed
- 14.8 All components of the hydraulic, including pump, P.T.O., reservoir, hoses and controls shall be mounted in a secure and professional manner
- 14.9 All welds shall be chipped, brushed and painted with black enamel
- 14.10 Dump body shall be furnished with all applicable clearance lights and reflectors to meet all F.M.V.S.S. and OSHA requirements. Mud flaps, factory installed body props, hoist control lever lockout kits, lever control grips and operational instructions at levers shall be furnished
- 14.11 All wiring shall be loomed and properly fastened. Wire connectors or splices shall be soldered and heat shrink connections; crimp-type connectors are not acceptable
- 14.12 The manufacturers standard warranty against defective materials and workmanship shall apply to the unit.

SPECIFICATIONS
for
CUSTOM SNOW PLOW HITCH

1. APPLICATION

- 1.1 This snow plow hitch will be mounted on a 2003 56,000 GVWR Cab and chassis for use by Lancaster County Engineers in snow removal projects on hard surface roads in the County.

2. MODEL

- 2.1 The equipment furnished under these specifications shall be new and of the latest improved model in current production as offered to the commercial trade.

MEETS SPECS
YES NO

3. CUSTOM HITCH

- | | | | |
|-------|-------|-----|---|
| _____ | _____ | 3.1 | Heavy duty tailored non-folding design |
| _____ | _____ | 3.2 | Hitch shall be designed and manufactured specifically for the truck provided.
(NOTE: No Universal or Modified Universal Hitch is acceptable) |
| _____ | _____ | 3.3 | All thrust loads must be transferred to chassis frame not to axle or spring assembly. |
| _____ | _____ | 3.4 | Quick hitch positive lock design |
| _____ | _____ | 3.5 | Hitch to be made so that tilting hood/fenders will tilt as much forward with hitch system installed as when hitch was not installed |
| _____ | _____ | 3.6 | Hitch shall be a minimum of 12 inches from grade at the lowest point |
| _____ | _____ | 3.7 | Hitch shall be primered and painted black and installed with grade 8 bolts as per manufacturers recommendations |
| _____ | _____ | 3.8 | Hydraulic pump mount bracket shall be incorporated into hitch frame |
| _____ | _____ | 3.9 | See Diagram 1A for general snow plow hitch design |

4. PAINT

- | | | | |
|-------|-------|-----|--|
| _____ | _____ | 4.1 | One (1) coat primer |
| _____ | _____ | 4.2 | Two (2) coats Omaha Orange (Please submit paint chip with bid) |

5. MANUALS

- | | | | |
|-------|-------|-----|--|
| _____ | _____ | 5.1 | One (1) Complete parts manual per hitch |
| _____ | _____ | 5.2 | One (1) complete operators manual per hitch plus one (1) |

6. MOUNTING

- | | | | |
|-------|-------|-----|---|
| _____ | _____ | 6.1 | Bid shall include complete mounting of custom hitch and related equipment |
|-------|-------|-----|---|

11 FT. HYDRAULIC REVERSIBLE SNOW PLOW WITH CUSTOM HITCH

1. APPLICATION

- 1.1 The snow plow will be utilized by the Lancaster County Engineers for snow removal projects on hard surface roads in the county.

2. MODEL

- 2.1 The equipment furnished under these specifications shall be new and of the latest improved model in current production as offered to the commercial trade.
- 2.2 Bidders are cautioned to read specifications carefully. The specifications may include requirements not commonly offered by the manufacturer.

MEETING SPECS

YES NO

3. BASIC DESIGN

- | | | | |
|-------|-------|-----|---|
| _____ | _____ | 3.1 | Heavy Duty II foot plow |
| _____ | _____ | 3.2 | Hydraulically reversible (ram type) |
| _____ | _____ | 3.3 | Hydraulically raised and lowered |
| _____ | _____ | 3.4 | Quick hitch design |
| _____ | _____ | 3.5 | Heavy duty custom hitch |
| _____ | _____ | 3.6 | Moldboard trip (Enclosed spring design) |

4. MOLDBOARD DIMENSIONS

- | | | | |
|-------|-------|-------|---|
| _____ | _____ | 4.1 | Height 41 inches minimum, 44 inches maximum |
| _____ | _____ | 4.2 | Length 11 feet |
| _____ | _____ | 4.3 | Approximate clearing path |
| _____ | _____ | 4.3.1 | 11' at 0 degrees |
| _____ | _____ | 4.3.2 | 8' 2" at 42 degrees |

5. MOLDBOARD CONSTRUCTION

- | | | | |
|-------|-------|-----|---|
| _____ | _____ | 5.1 | 10 USS gauge steel <u>Minimum</u> |
| _____ | _____ | 5.2 | 8 reinforcing ribs <u>Minimum</u> |
| _____ | _____ | 5.3 | ½ thick reinforcing ribs <u>Minimum</u> |
| _____ | _____ | 5.4 | 2 ½" x 2 ½" x 3/8" top angle horizontal support or equal strength design |
| _____ | _____ | 5.5 | Upper edge of mold board to extend beyond cutting edge in normal plowing position with bolt on rubber shield to act as high speed deflector |
| _____ | _____ | 5.6 | Moldboard to be complete with two (2) <u>carbide</u> cutting edge wear shoes mounted directly behind cutting edge Minimum of 14 sq. in. of bearing surface per shoe |
| _____ | _____ | 5.7 | Approximate weight of mold board 1700 lbs. (Note: Please state weight of mold board _____ lbs.) |
| _____ | _____ | 5.8 | Lift height from ground level to be a minimum of 14 inches (NOTE: Please state maximum lift height from ground level _____ inches). |

Equipment Specs con't.

MEETS SPECS

YES NO

6. TRIPPING MECHANISM

- | | | | |
|-------|-------|-----|---|
| _____ | _____ | 6.1 | Moldboard trip (Single enclosed spring type) |
| _____ | _____ | 6.2 | Moldboard to be standard AASHO punch |
| _____ | _____ | 6.3 | Cutting section(s) shall be a minimum 1/2" thick, high carbon steel |

7. REVERSING FRAME

- | | | | |
|-------|-------|-----|--|
| _____ | _____ | 7.1 | Heavy duty constructed of not less than 3 inch square tube 1/4 inch wall or approved equal strength design |
| _____ | _____ | 7.2 | Frame to be connected close to moldboard ends for maximum support |

8. DRIVE FRAME

- | | | | |
|-------|-------|-----|--|
| _____ | _____ | 8.1 | Heavy duty A-frame design |
| _____ | _____ | 8.2 | A-frame construction to be 3 1/2 inch square tube x 1/4 inch wall thickness or approved equal strength design |
| _____ | _____ | 8.3 | A-frame to be connected to heavy duty plate and bolted to oscillation coupler bar with a <u>minimum</u> 2 1/2 inch self lubricating bolt |

9. HYDRAULICS

- | | | | |
|-------|-------|-----|---|
| _____ | _____ | 9.1 | Reversing system shall incorporate two (2) double acting minimum three (3) inch bore hydraulic cylinders and protective cushion valve |
| _____ | _____ | 9.2 | Hydraulics must provide necessary power to reverse the plow from 42 degrees right to 42 degrees left and hold the plow at any angle within the arc without the use of manual locking device |
| _____ | _____ | 9.3 | Hoses to be two (2) wire braid 4000 lb. working pressure |
| _____ | _____ | 9.4 | Quick couplers or attaching and detaching hydraulic hoses during snow removal shall be supplied |
| _____ | _____ | 9.5 | Lift cylinder to be a <u>minimum</u> of 3 inch bore and 10 inch stroke |

10. MANUALS

- | | | | |
|-------|-------|------|---|
| _____ | _____ | 10.1 | One complete parts manual per plow |
| _____ | _____ | 10.2 | One complete operators manual per plow plus one (1) |

SPECIFICATIONS
for
TRUCK MOUNTED SAND AND CHEMICAL
SPREADERS FOR LANCASTER COUNTY

MEETS SPECS
YES NO

1. GENERAL INFORMATION

- | | | | | |
|-------|-------|--|-----|--|
| _____ | _____ | | 1.1 | The heavy duty spreader and spinner shall be of the most current model and design as regularly manufactured and marketed |
| _____ | _____ | | 1.2 | Spreader to be installed under tailgate and mounted to the sides of the dump body, and below the floor level of the dump box with quick detachable hardware for easy removal in the springtime |
| _____ | _____ | | 1.3 | The mounting shall allow for dumping of material without interference from the spreader |
| _____ | _____ | | 1.4 | Overall spreader width shall be 96" |

2. BODY CONSTRUCTION

- | | | | | |
|-------|-------|--|-----|--|
| _____ | _____ | | 2.1 | Auger trough shall be 7 gauge with 1/4" one-piece end plates |
| _____ | _____ | | 2.2 | The cover panel shall be 7 gauge one-piece hinged integral part of the unit that can be raised when spreading and lowered when dumping |
| _____ | _____ | | 2.3 | The drive mechanism shall be protected by a 14 gauge chain guard cover |
| _____ | _____ | | 2.4 | Unit shall have a 7 gauge hinged bottom that when released shall expose the entire length to the augers for easy clean out |

3. FEED MECHANISM

- | | | | | |
|-------|-------|--|-----|---|
| _____ | _____ | | 3.1 | Sealed, self-aligning radial bearing with grease fitting shall be used |
| _____ | _____ | | 3.2 | Unit shall have two 4" (nominal) heavy duty augers consisting of 3/8" fitting that is welded to a Sch. 40 (ASTM) pipe |
| _____ | _____ | | 3.3 | Augers shall have normal and reverse fitting to the discharge port and supported by 1" steel shaft ends |
| _____ | _____ | | 3.4 | Hydraulic motor driven augers through sprocket and #60 roller chain |
| _____ | _____ | | 3.5 | Quick disconnect for hydraulic hoses for easy removal |
| _____ | _____ | | 3.6 | Hydraulic motor to be of orbital design delivered high torque at low speed to power the auger |
| _____ | _____ | | 3.7 | Auger speed rate to be variable |

4. SPINNER

- | | | | | |
|-------|-------|--|-----|--|
| _____ | _____ | | 4.1 | The independent spinner motor to be mounted directly to the spinner |
| _____ | _____ | | 4.2 | Spinner to be single left side mount 18" dia. to provide for a uniform spreading pattern from 4' to 40' |
| _____ | _____ | | 4.3 | The spinner assembly shall be adjustable to allow for variable spreading patterns by sliding the hinged form sideways on the shaft so that the point at which the material hits the spinner disc is varied |
| _____ | _____ | | 4.4 | Spinner to have quick disconnect for easy removal of hydraulic hoses from motor |
| _____ | _____ | | 4.5 | Spinner shall have shield to prevent material from striking the truck |

Equipment Specs con't.

MEETS SPECS

YES NO

5. HYDRAULIC CONTROLS

- | | | | |
|-------|-------|-----|---|
| _____ | _____ | 5.1 | All hydraulic valves to be mounted outside of cab |
| _____ | _____ | 5.2 | Remote electric controls |
| _____ | _____ | 5.3 | Mounted inside the cab with operator easy access |

6. MANUALS

- | | | | |
|-------|-------|-----|--|
| _____ | _____ | 6.1 | One (1) parts manual per unit |
| _____ | _____ | 6.2 | One (1) operators manual per unit plus one (1) |

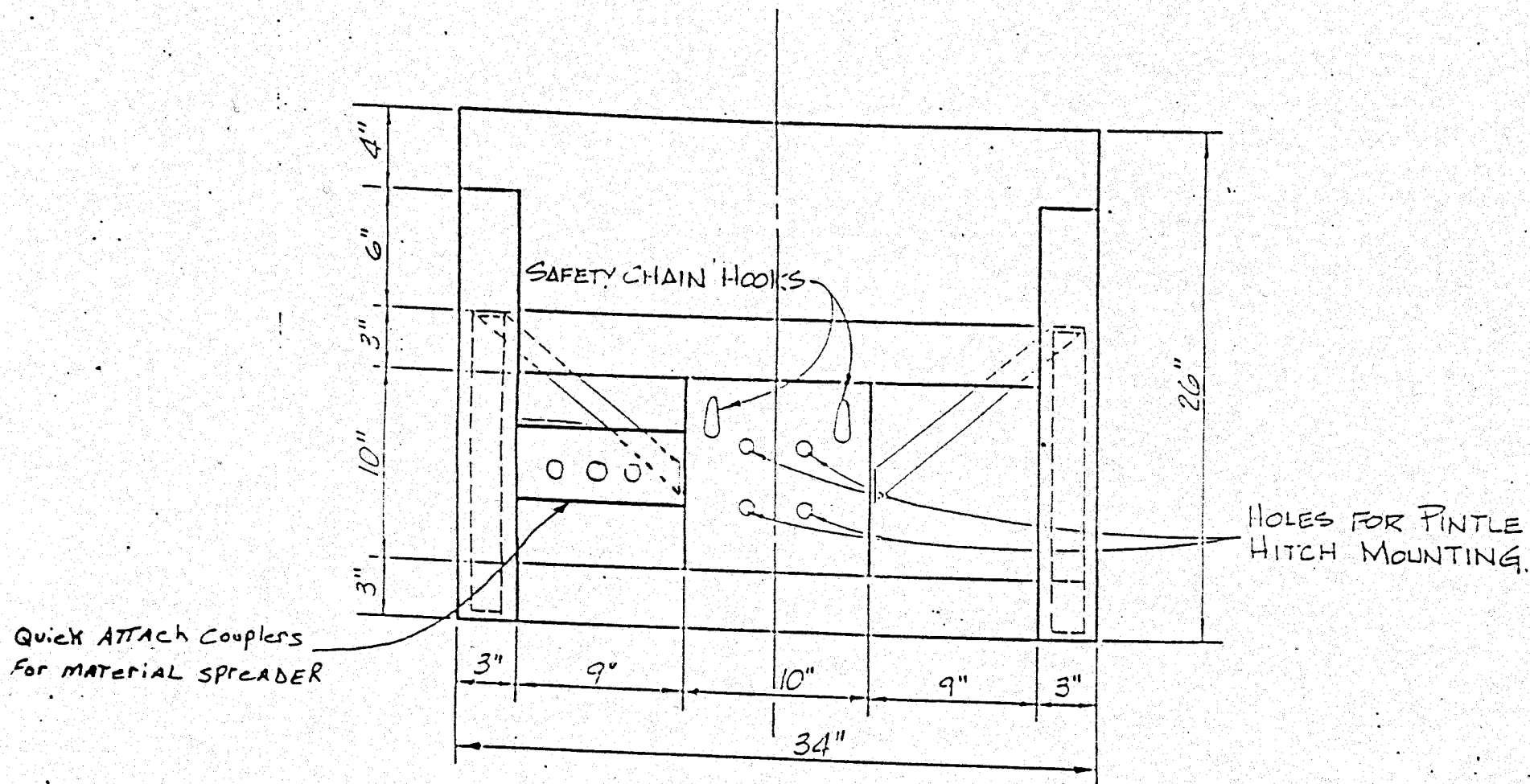
7. PAINT

- | | | | |
|-------|-------|-----|--|
| _____ | _____ | 7.1 | Unit to be primed and painted Omaha Orange |
|-------|-------|-----|--|

NOTE:

BOTTOM OF BUMPER FRAME TO GROUND = 16"

BOTTOM OF PINTLE HITCH TO GROUND = 19 1/2"



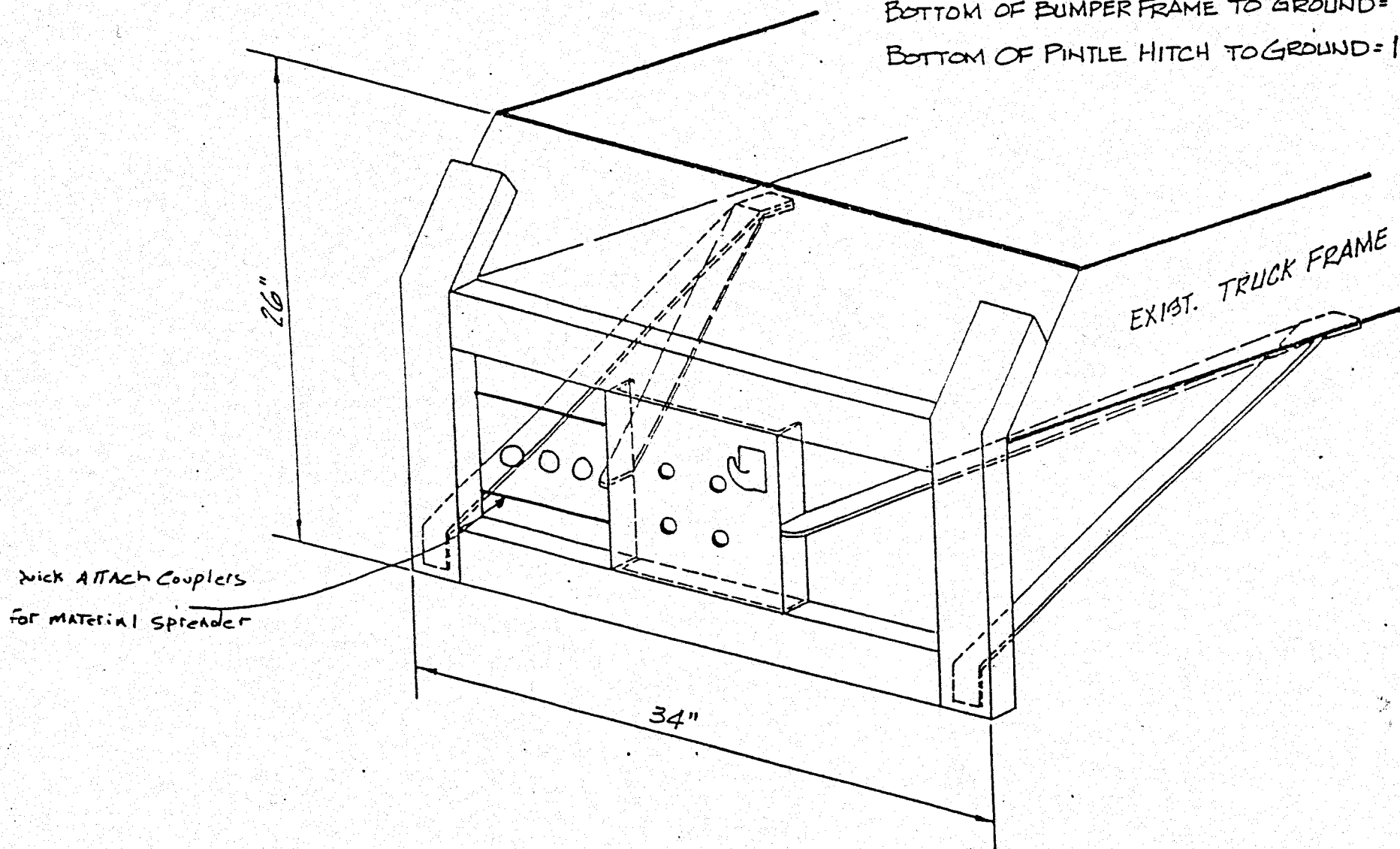
DETAIL OF
I.C.C. BUMPER
(ELEVATION)
SCALE: 1 1/2" = 1'-0"

JSC
10-1-86

NOTE:

BOTTOM OF BUMPER FRAME TO GROUND = 16"

BOTTOM OF PINTLE HITCH TO GROUND = 19 1/2"



DETAIL OF
I.C.C. BUMPER
(PERSPECTIVE)
SCALE: 1 1/2" = 1'-0"

Diagram 1A

